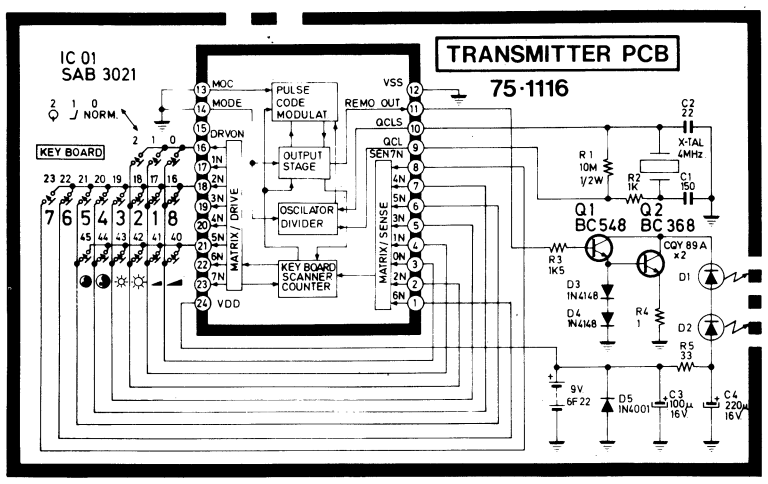
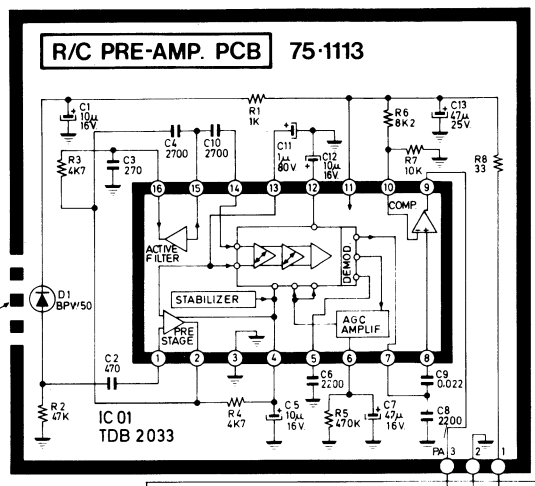
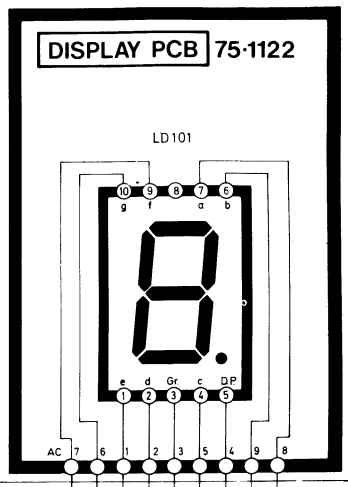
FISHER FTM251

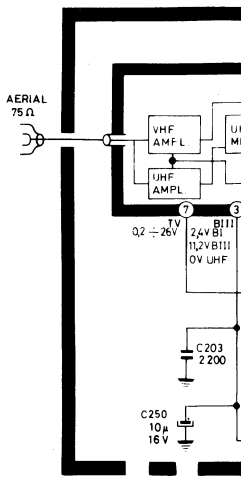
MODEL

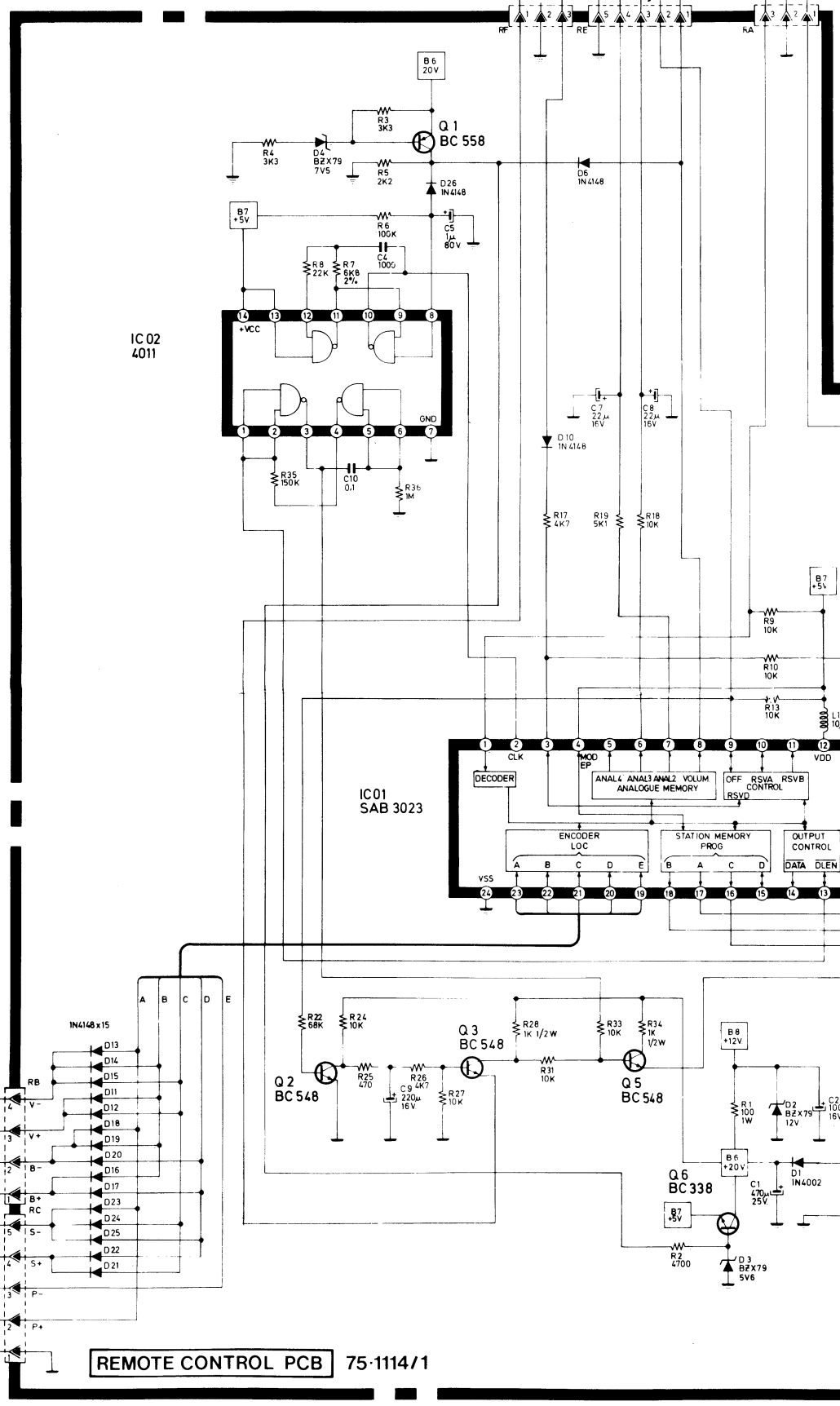
SERVICE MANUAL

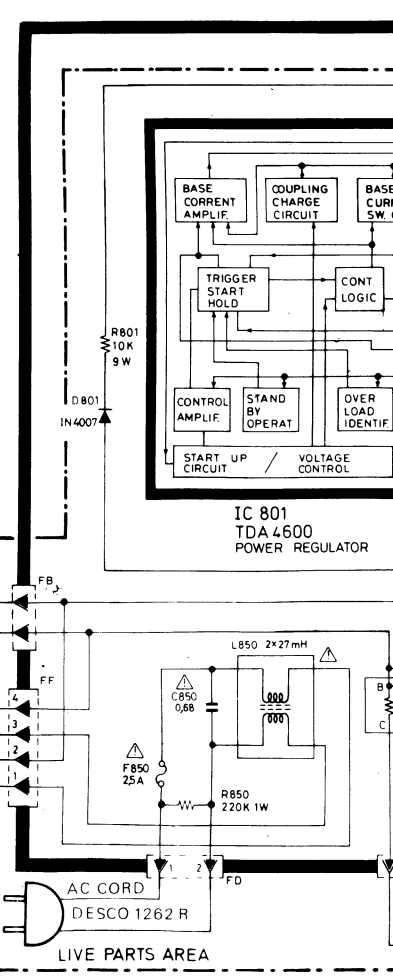


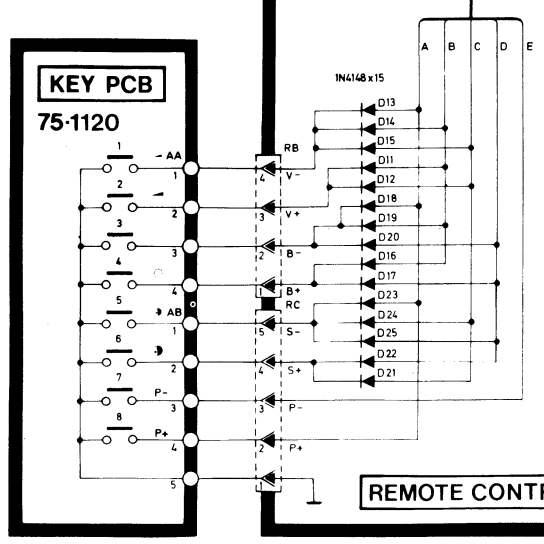












FISHER

COLOUR TELEVISION

Model FTM 251

Chassis N°035

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark ⚠ in this circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the parts list of service manual be used for components replacement pointed out by the mark.

CIRCUIT DIAGRAM NOTES:

1. All resistance values in ohms K = 1,000, M = 1,000,000.
2. Unless otherwise noted in circuit diagram all capacitor values less than 1 are expressed in μF, and the values more than 1 are in pF.
3. Voltage reading taken with "VOM" from point indicated to chassis ground.
   Voltage reading taken using colour bar signal, all controls at normal, AFC switch in "OFF" position. Some voltage may vary with signal strength.
4. Waveforms were taken with colour bar signal and controls adjusted for normal picture. Waveforms were taken using a wide band oscilloscope and low capacity probe.
5. All resistance values for transformers must be measured under unwired condition.
6. This circuit diagram covers basic or representative chassis only. There may be some component or partial circuit difference between actual chassis and circuit diagram.

MAIN PCB 75-1121

TU 201
UV413

Q203
BC547B

IC 201
TDA2541 N7
VIF AMP, VIDEO DET.
AGC & A.F.T.

Q201
BF959
PIF PRE-AMP

SAW FILTER
SF 201
OFW361D

SW 201
A.F.T.
SWITCH

AERIAL
75 Ω

PIF ADJ.

TUNING PCB 75·1112/1

IC 103
TAA 550

IC 105
M192 or
LM1017

IC 101
TDB 1030

IC 801
TDA4600
POWER REGULATOR

IC803 4N35
VOLTAGE AND WAVEFORMS
READING TAKEN FROM INDICATED POINT TO
NOT ISOLATED GROUND (NEGATIVE OF C810).

Q401
BC548

Q402
BC557B

IC802
L7812 CV

DL402
L7332
DL20002

DELAY LINE
DL701
AZ1706
SDL145
DL401

CF403
6,5 MHz
TPS 6,5MB

CF401
5,5 MHz
TPS 5,5MB

CF402
TPS4,43MA
TRAP

X401 8,86MHz

GAIN CONTROLED I.F. AMP
SYNCRON DEMOD.
REF. AMP.
AFT SYN. DEM.
VIDEO OUT.
W.S. INV.
AGC DET NOISE INV.
AFT OUT.
CROMA AMPLIF.
BURST PHASE DETEC.
8,86MHz OSCIL
÷2 90°SHIFT
R-Y G-Y DEMOD B-Y
KILLER DETEC.
ACC DETEC.
PEAK WHITE DET.
KEY PULSE SEP.
C.W. OSC. FREC.
VC401 22÷22
AMPL
L-03 10µH
L401 15µH
L404 PHASE

VERTICAL SYNC OUTPUT
BURST GATING LINE BLANKIN PULSE
PHASE DETECTOR
PHASE SHIFTER
PULSE DURATION SWITCH
LINE TRIGGER PULSE OUTPUT STAGE
LOW SUPPLY VOLTAGE PROTECTION
VERTICAL SYNC SEPARATOR
TRIGGER PULSE GENERATOR
MUTING STAGE
VERTICAL SYNC S-OFF
GATE (S-V)
GATE MODE SWITCH
GATE (S-V-G)
SYNC GATING PULSE GENERATOR
TRANSMITER INDENTIF
SYNC SEPARATOR NOISE GATE
NOISE SEPARATOR
COINCIDENCE DETECTOR
TIME CONSTANT SWITCH
PHASE DETECTOR
VOLTAGE LIMITER
OSCILLATOR

VR601 47K LIN
H. PHASE

BASE CORRENT AMPLIF.
COUPLING CHARGE CIRCUIT
BASE CURRENT SW. OFF
TRIGGER START HOLD
CONT LOGIC
EXT. TRIGG BLOCKING FUNCTION
COLECTOR CURRENT SIMULATOR
CONTROL AMPLIF.
STAND BY OPERAT
OVER LOAD IDENTIF.
ZERO TRANSIT IDENTIF.
START UP CIRCUIT / VOLTAGE CONTROL
REFERENCE VOLTAGE

DECODER BCD TO SEVEN SEGMENT
ANAL SWITCH

T801 CONVERTER TRANS 93700-00

B1 202V
B2 117V
B3 26V
B5 12V

FA
FJ
FH
FC
FD
FE
FA-1
FA-9
FA 10
F50
J90
FJ(d)
R629 (d)

TP401
TP402
TP601
TP602
TP700
TP802
TP803

DEGAUSING COIL L851

PTC 850

L850 2×27mH

1262 R

TS AREA

IC 201
TDA2541 N7
VIF AMP., VIDEO DET.
A.G.C & A.F.T

SW 201
A.F.T.
SWITCH

AUDIO
SOCKET PCB
75-1123

IC 301
TDA 4190

Q302
BC 558

Q301
BC548

CRT SOCKET PCB 75-1105/1

IC 401
TDA 3561 A
VIDEO & COLOUR

IC701
TDA1170H

IC601
TDA 2594
LINE
OSCILLATOR
COMBINATION

Q501
BF869

Q511
BF869

Q521
BF 869

Q601
BC337/25

Q602
BU208

CATODE
RAY
TUBE
A51-230X

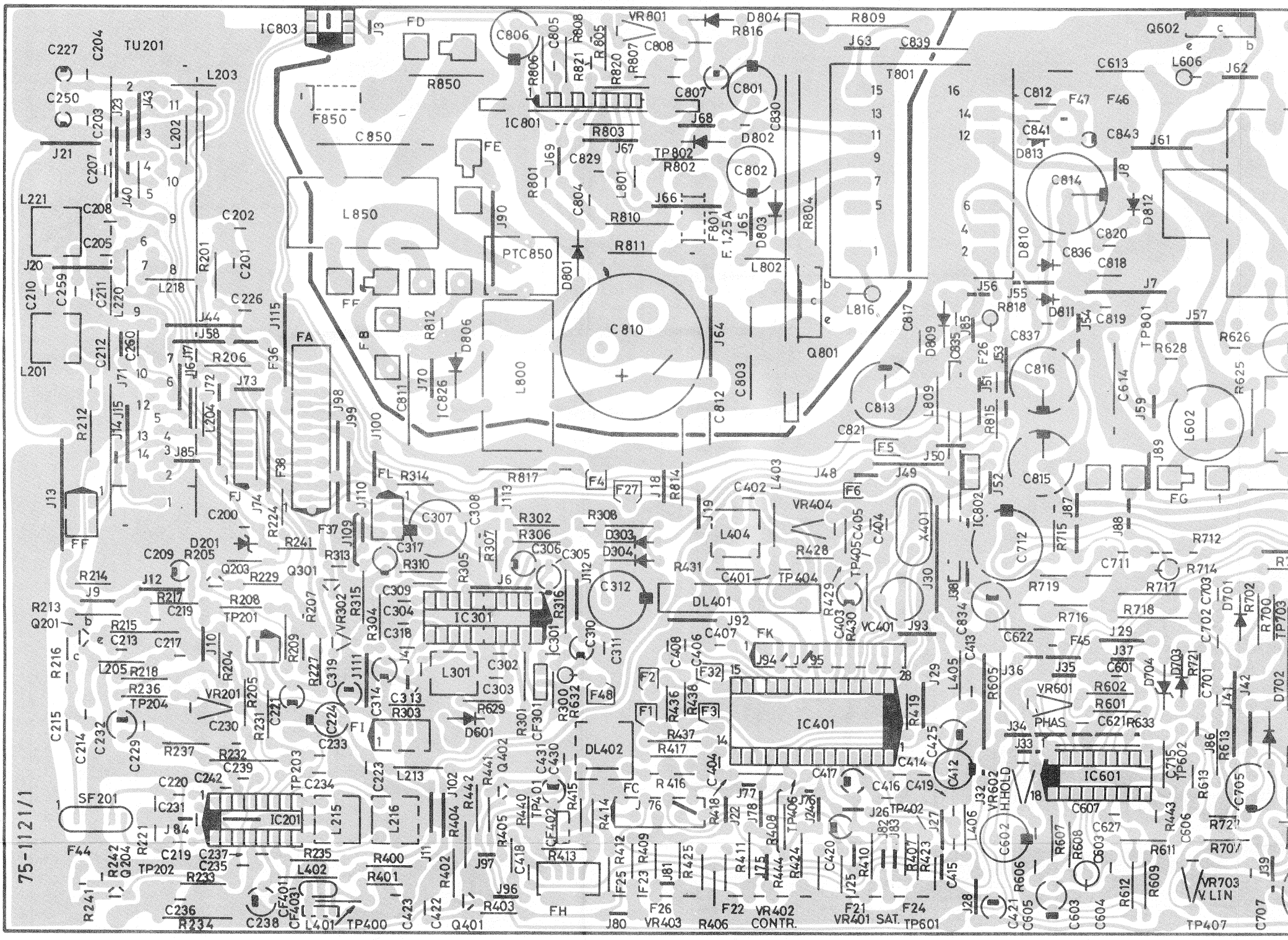
TRIPLER
TVK-196/27

42-3029/03

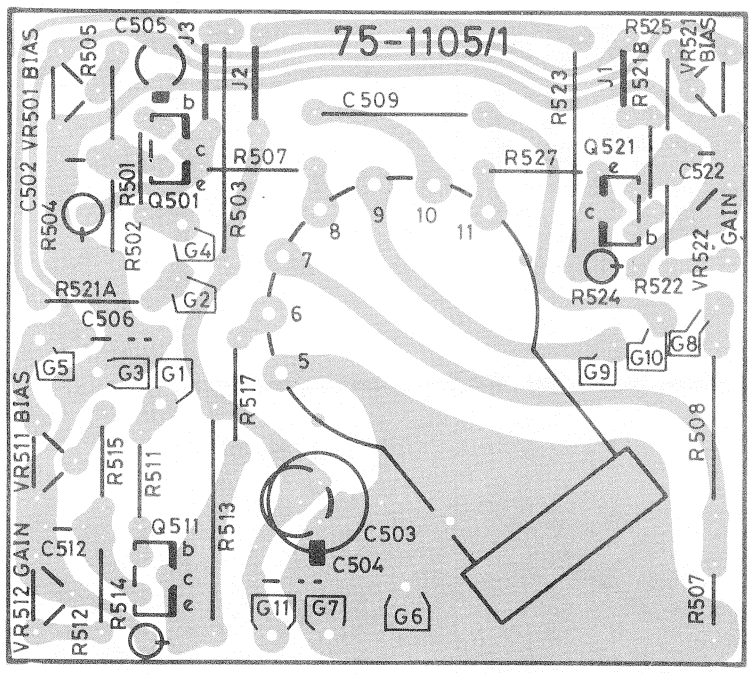
Q1 Q2 Q3 Q5 Q6 Q203 Q301 Q401 Q402 Q601 Q302 Q201

FUSE RESIST

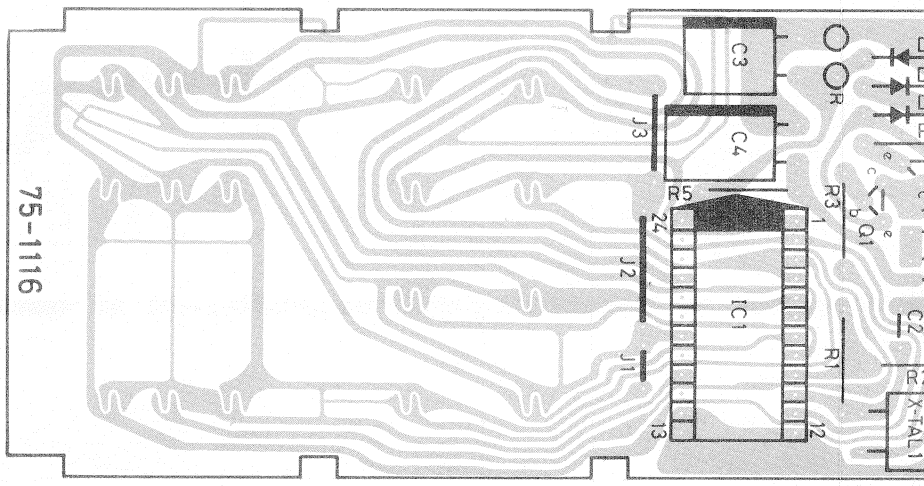
MAIN PCB



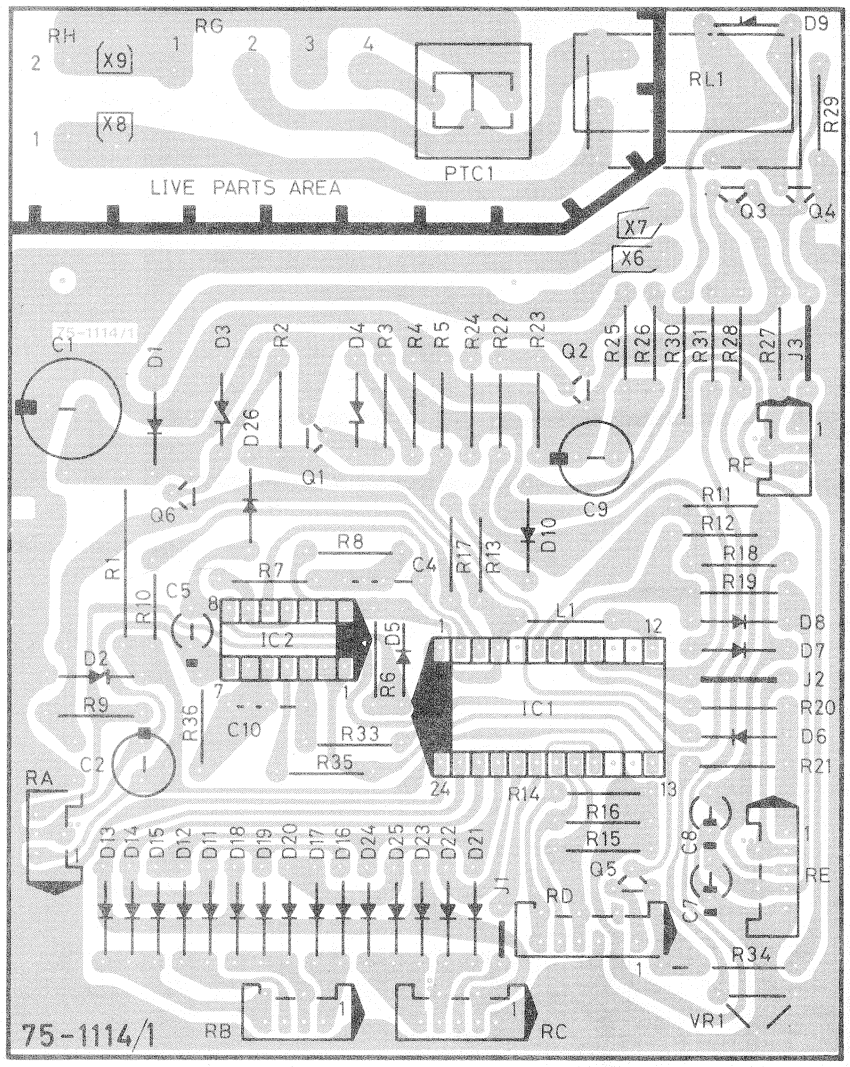
CRT SOCKET PCB



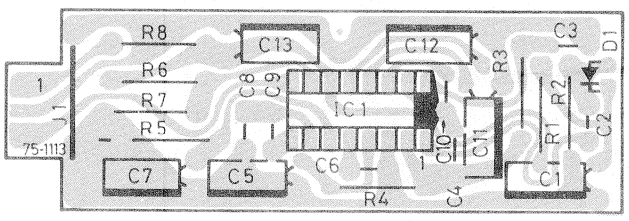
TRANSMITTER PCB



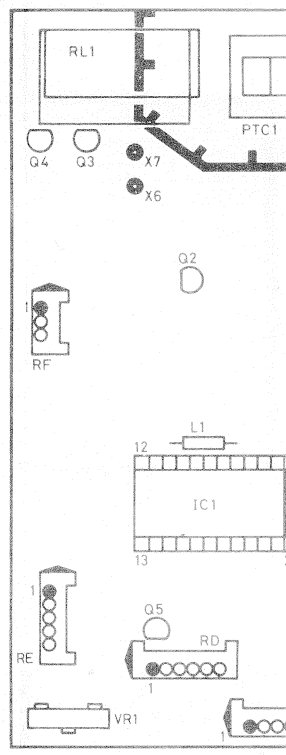
REMOTE CONTROL PCB



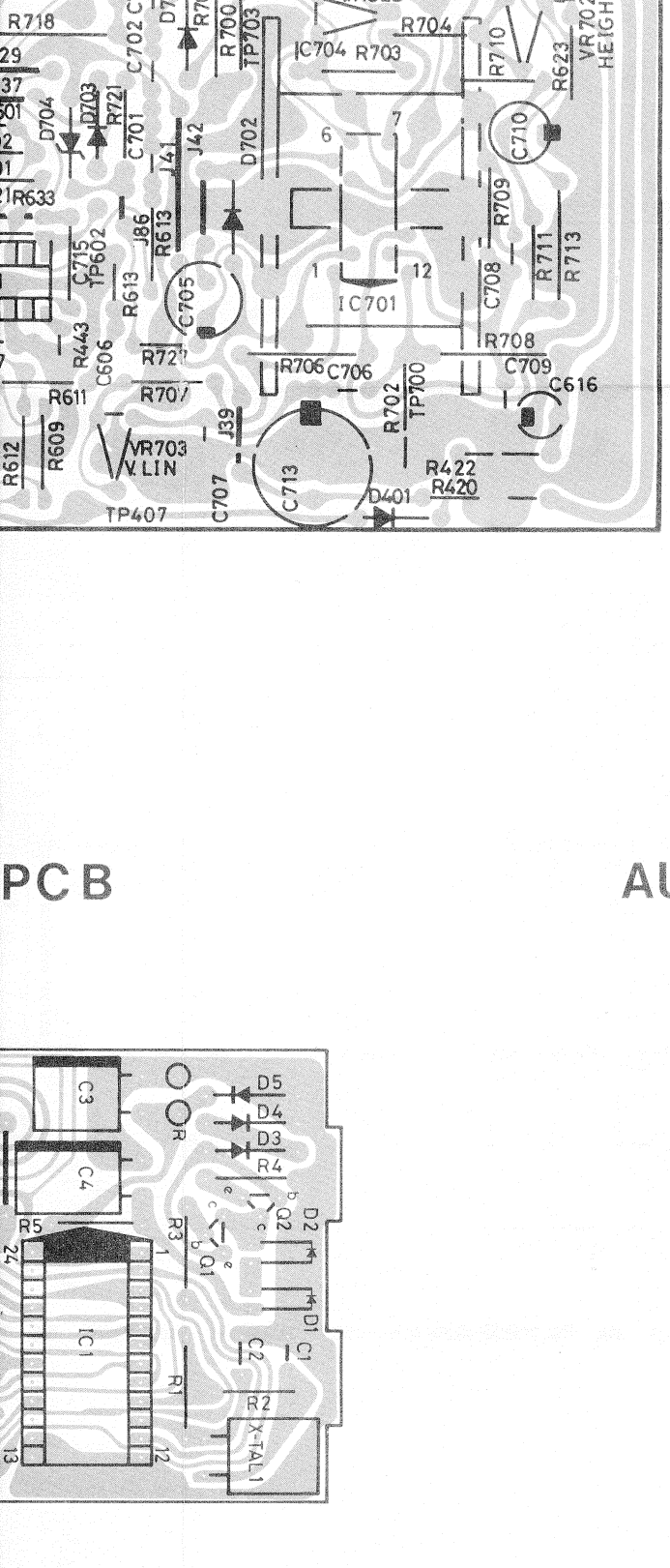
R/C PRE-AMP PCB



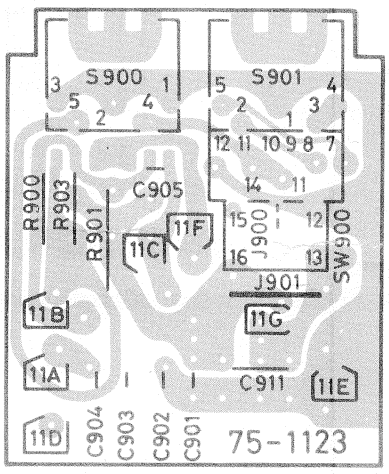
COMPONENT

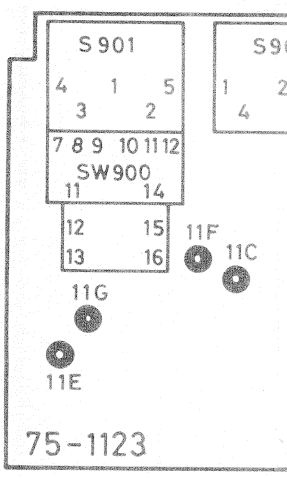


PCB

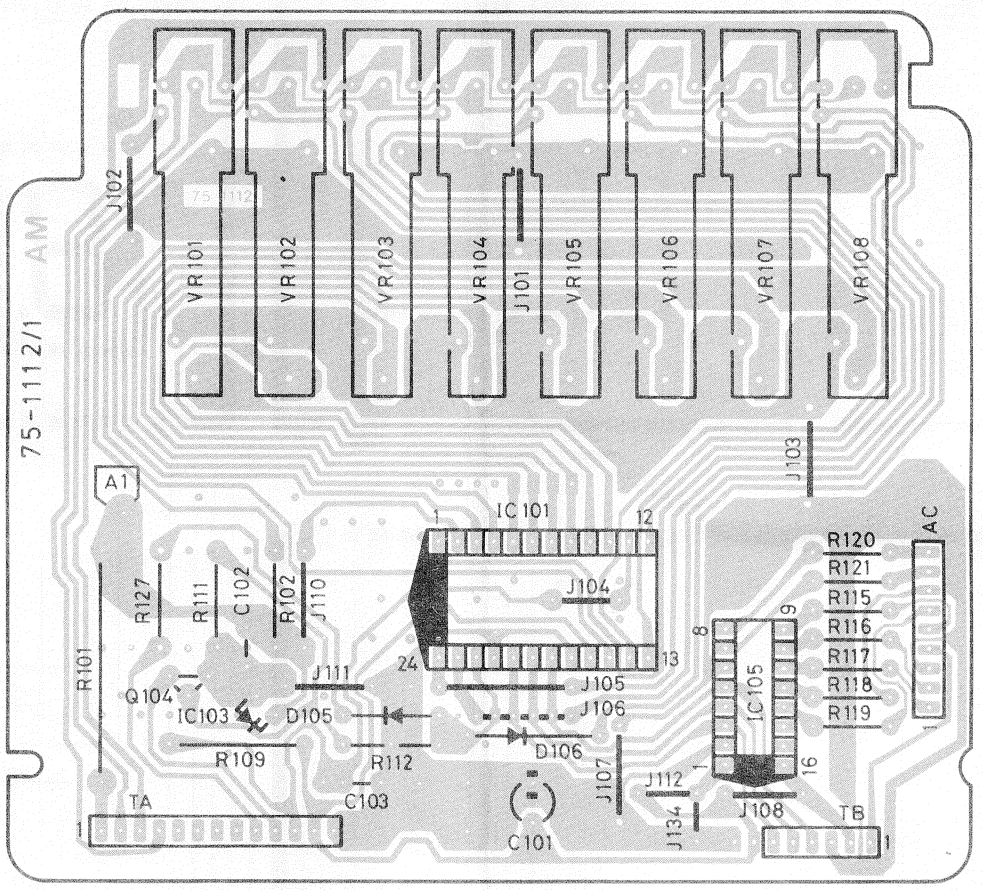


AUDIO SOCKET PCB





TUNING PCB



COMPONENTS LOCATION